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24253	7590	04/30/2008	EXAMINER	
JOEL I ROSENBLATT 445 11TH AVENUE INDIALANTIC, FL 32903			LOFTIS, JOHNNA RONEE	
			ART UNIT	PAPER NUMBER
			3623	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/605,715	<b>Applicant(s)</b> DIVELY ET AL.	
	<b>Examiner</b> JOHNNA R. LOFTIS	<b>Art Unit</b> 3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. The following is a first office action upon examination of application number 10/605715. Claims 1-44 are pending and have been examined on the merits discussed below.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 22 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear what applicant intends to claim.

4. Claim 44 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim is directed to producing data *indicative* of alarms. It is not clear if data that *may be* associated with an alarm is stored or if an actual alarm is produced. Clarification is requested.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 5-23, 27-34 and 38-44 rejected under 35 U.S.C. 102(b) as being anticipated by Greenfield et al, US 5,737,227.

As per claim 23, Greenfield et al teaches data collection for storing data in a database and the step of producing reports from said stored data (column 7, lines 33-67 – storage of collected information in computer system); said step of producing reports includes the step of producing summary recommended work reports summarizing recommended work for controlling corrosion at the enterprise, structural or element levels (abstract and column 3, line 59 – column 4, line 4 – data collection and report generation).

As per claim 27, Greenfield et al teaches producing summary work reports includes the step of producing for at least one summary work report, listing the recommended work in at least one time defined forecast, or a report of the cost of deferring any part of said recommended work (table 4 - data operations includes reporting cost and schedule data as well as preparation of work packages).

As per claim 28, Greenfield et al teaches producing a report listing the recommended work in at least one time defined forecast, includes the step of producing a plurality of said time defined forecast reports or separate respective time periods (column

Art Unit: 3623

3, line 59 – column 4, line 4 – forecasting of maintenance work using interactive screens and data generating reports).

As per claim 29, Greenfield et al teaches producing summary recommended work reports at said element level includes the step of producing at said element level, at least a coating system performance report or optimum work schedule report, or deferred work report or completed work report (column 12, lines 53-65 – coating performance reporting).

As per claim 30, Greenfield et al teaches storing data indicative of condition evaluation of at least one element and or respective corrosion action for a respective element at a defined degradation level (column 11, table 8, storage of condition of material as well as evaluation for repair to prevent further degradation).

As per claim 31, Greenfield et al teaches storing data indicative of corrosion control standards for costs, actions, or expected service life (column 5, table 3 – coating system standards).

As per claim 32, Greenfield et al teaches storing element data indicative of a respective element and of said respective element's total area, or event type, or date or condition grade or percentage repair area or coating system or critical inspection items or digital photographs and said step of producing summary recommended work reports at said element level include the step of using at least some of the element data and at least some of said data indicative of corrosion control standards for producing budget estimates or maintenance actions (column 8, lines 1-29 – inspection information including defects (condition) as well as photographs; column 3, line 59 – column 4, line 4 – forecasting of maintenance work using interactive screens and data generating reports).

Art Unit: 3623

As per claims 1 and 5-11, they teach the system with means for performing the method of claims 23 and 27-32. Since Greenfield et al teaches a computer system performing the claimed method (column 7, lines 33-52) the same rejection as applied to claims 23 and 27-32 is applied to claims 1 and 5-11.

As per claim 12, Greenfield et al teaches producing summary reports, includes means for producing structure reports by including at least a plurality of elements in said respective structure (abstract – assets include structures; column 4, step 100 – asset grouping; column 7, lines 52-63 - asset information is entered; abstract and column 3, line 59 – column 4, line 4 – data collection and report generation).

As per claim 13, Greenfield et al teaches means for storing data indicative of corrosion control standards, includes means for storing data indicative of an identifier and one or more standards of surface preparation requirements, primer coat, second coat, third coat, finish coat, installed cost, touch-up costs, refresh costs, restore costs, specific use identifier, initial condition factor or degradation rate factor (column 5, table 3 - coating systems standards).

As per claim 14, Greenfield et al teaches means for producing summary recommended work reports includes means for producing an optimum maintenance scheduling report, responsive to at least one selected element, selected acceptable condition grade, condition grade expected in relation to the related installed coating system for the respective element, providing actions or budget estimates (column 8, lines 1-29 – inspection information including defects (condition) as well as photographs; column 3, line 59 – column 4, line 4 – forecasting of maintenance work using interactive

Art Unit: 3623

screens and data generating reports; column 2, lines 20-25 – maintenance planning and budget estimates).

As per claim 15, Greenfield et al teaches means for producing summary recommended work reports includes means for producing a material performance report for comparing the performance of an applied corrosion control system with expected performance for said applied system and including means for combining element data for at least one selected element, said element data including actual condition grade data, with data indicative of expected performance for said element with said applied system (column 12, lines 53-65 – performance reports; column 2, lines 26-30 – performance of installed coating and lining systems are reported).

As per claim 16, Greenfield et al teaches the means for producing summary recommended work reports includes means for producing a cost of deferring work report including data indicative of at least one selected element, a selected deferral period, data indicative of the expected performance of a corrosion control system applied to said selected element, means responsive to said element data and said expected performance data for calculating future costs of deferred maintenance (column 13, lines 53-65 maintenance and cost reports).

As per claim 17, Greenfield et al teaches means for producing summary recommended work reports includes means for producing a completed work report responsive to element data indicative of the element name, and a completed event type or completed event date or costs of completion (table 10, scheduled work and calculated costs).

Art Unit: 3623

As per claim 18, Greenfield et al teaches means for producing a summary recommended work report includes means for using at least some of said element data and at least some of said data indicative of corrosion control standards for producing budget estimates for a selected element and for comparing said budget estimates with said costs of completion for said selected element (column 5, table 3 – coating system standards used in conjunction with work planning table 4 wherein budgetary requirements are considered).

As per claim 19, Greenfield et al teaches means for producing reports includes means for producing a critical inspection attribute report; said means for producing said critical inspection action report including means for using element data indicative of critical inspection items, maintenance actions performed or completed for at least one element (column 4, table 1, lists whether element is critical; table 6 criticality is entered).

As per claim 20, Greenfield et al teaches means for producing optimum maintenance scheduling report includes means for using said selected element, condition grades acceptable before maintenance is to be performed and wherein said condition grades expected is derived from data indicative of said coating system installed for said selected element (column 12, lines 53-65 – maintenance activity reports column 5, table 2, based on defects or condition of material inspection frequency is set).

As per claim 21, Greenfield et al teaches means for producing summary recommended work reports includes means for maintenance priority reports including means for using element data for at least one selected element, indicative of priority, refresh or restore costs, and means for determining the priority of maintenance for said



Art Unit: 3623

selected element based on designated allocation of maintenance budget (column 12, lines 53-65 – master asset or subcomponent priority lists).

As per claim 22, Greenfield et al teaches means for producing alarms responsive to said coating system performance report (column 4, table 2 - performance data indicates substrate condition and coating integrity on a scale; ie. structurally failed and poor integrity).

As per claim 33 Greenfield et al teaches a database adapted to store data indicative of a facility and elements within said facility subject to corrosion (table 1); said database adapted to store data indicative of corrosion control standards for controlling corrosion on said elements (table 3); said data processor adapted to access said data in said database to produce data indicative of reports of corrosion control plans for said elements (table 4 data operation reports).

As per claim 34, Greenfield et al teaches the database is adapted to include data indicative of at least one structure comprising a plurality of elements or an enterprise comprising a plurality of structures and said data processor is adapted to produce at least one summary recommended work report summarizing recommended work for controlling corrosion at the enterprise, structural or element level (table 4)

As per claim 38, Greenfield et al teaches said database is adapted to store data indicative of corrosion control standards for surface preparation requirements, primer coat, second coat, third coat, finish coat, installed cost, touch-up costs, refresh costs, restore costs, specific use identifier, initial condition factor or degradation rate factor (table 3 coating systems standards).

Art Unit: 3623

As per claim 39, Greenfield et al teaches data processor responsive to said data indicative of said elements and said corrosion control standards is adapted to produce data indicative of at least one optimum maintenance scheduling report including budget estimates or scheduled actions (column 12, lines 53-65 – maintenance activity report).

As per claim 40, Greenfield et al teaches data processor responsive to said data indicative of said elements and said corrosion control standards is adapted to produce data indicative of at least one material performance report comparing the performance of an applied corrosion control system with expected performance for said applied corrosion control system (column 13, lines 53-65 – coating use and performance list report).

As per claim 41, Greenfield et al teaches data processor is adapted to access said data in said database to produce data indicative of reports of corrosion control plans for said elements, is adapted to produce data indicative of cost of deferring work including data indicative of at least one selected element, a selected deferral period, data indicative of the expected performance of a corrosion control system applied to said selected element, and responsive to said element data and said expected performance data, data indicative of the future costs of deferred maintenance (column 13, lines 53-65 maintenance and cost reports).

As per claim 42, Greenfield et al teaches database is adapted to store element data indicative of a respective element and of said respective element's total area, or event type, or date or condition or grade, or percentage repair area or coating system or critical inspection items or digital photographs (column 10, table 6, for example, criticality, total surface area, date, component type).

Art Unit: 3623

As per claim 43, Greenfield et al teaches data processor adapted to access said data in said database indicative of at least one corrosion control standard for at least one selected element is adapted to produce data indicative of maintenance priority report, responsive to said element and standard data (column 13, lines 53-65 – maintenance report; also table 4 – data operations reports).

As per claim 44, Greenfield et al teaches data processor is adapted to access said data indicative of said at least one performance report and responsive to said performance report data, produce data indicative of alarms (column 4, table 2 - performance data indicates substrate condition and coating integrity on a scale; ie. structurally failed and poor integrity).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2-4, 24-26 and 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greenfield et al, US 5,737,227.

As per claim 24, Greenfield et al teaches data collection, analyzing data and generating reports (column 3, line 59 – column 4, line 4), but does not explicitly teach producing log on screens to access such data. Official notice is taken that at the time of the instant invention it would have been obvious to one of ordinary skill in the art to

Art Unit: 3623

incorporate secure access with log on screens as a way to secure data and restrict access to only those users with access rights since the instant invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized the results of the combination were predictable.

As per claim 25, Greenfield et al teaches data collection, analyzing data and generating reports (column 3, line 59 – column 4, line 4), but does not explicitly teach producing log on screens to access such data. Official notice is taken that at the time of the instant invention it would have been obvious to one of ordinary skill in the art to incorporate secure access with log on screens as a way to secure data and restrict access to only those users with access rights since the instant invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized the results of the combination were predictable.

As per claim 26, Greenfield et al teaches data collection, analyzing data and generating reports (column 3, line 59 – column 4, line 4 and column 12, lines 53-65), but does not explicitly teach producing log on screens to access such data. Official notice is taken that at the time of the instant invention it would have been obvious to one of ordinary skill in the art to incorporate secure access with log on screens as a way to secure data and restrict access to only those users with access rights since the instant invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized the results of the combination were predictable.

Art Unit: 3623

As per claims 2-4, they teach the system with means for performing the method of claims 24-26. Since Greenfield et al teaches a computer system performing the claimed method (column 7, lines 33-52) the same rejection as applied to claims 24-26 is applied to claims 2-4.

As per claim 35, Greenfield et al teaches data collection, analyzing data and generating reports (column 3, line 59 – column 4, line 4), but does not explicitly teach producing log on screens to access such data. Official notice is taken that at the time of the instant invention it would have been obvious to one of ordinary skill in the art to incorporate secure access with log on screens as a way to secure data and restrict access to only those users with access rights since the instant invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized the results of the combination were predictable.

As per claim 36, Greenfield et al teaches data collection, analyzing data and generating reports (column 3, line 59 – column 4, line 4), but does not explicitly teach producing log on screens to access such data. Official notice is taken that at the time of the instant invention it would have been obvious to one of ordinary skill in the art to incorporate secure access with log on screens as a way to secure data and restrict access to only those users with access rights since the instant invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized the results of the combination were predictable.

Art Unit: 3623

As per claim 37, Greenfield et al teaches data collection, analyzing data and generating reports (column 3, line 59 – column 4, line 4), but does not explicitly teach producing log on screens to access such data. Official notice is taken that at the time of the instant invention it would have been obvious to one of ordinary skill in the art to incorporate secure access with log on screens as a way to secure data and restrict access to only those users with access rights since the instant invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized the results of the combination were predictable.

### *Conclusion*

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Arnarson et al, US 5,229,840 – apparatus and method to measure and monitor coating of objects

Bellows et al, US 5,132,920 – automated system to prioritize repair of plant equipment

Cornett et al, US 5,216,612 – intelligent computer integrated maintenance system and method

Cox et al, US 5,401,317 – coating control apparatus

Fitts et al, US 5,142,648 – method and apparatus for paint inspection

Glass et al, US 5,437,773 – method for monitoring environmental and corrosion

Homstad, US 4,902,398 - computer program for vacuum coating systems

Art Unit: 3623

Rawlings et al, US 6,177,189 – appliqués for providing corrosion protection

Yamauchi et al, US 5,648,919 – maintenance systems for degradation of plant component parts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHNNA R. LOFTIS whose telephone number is (571)272-6736. The examiner can normally be reached on M-F 8am-4:30pm.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/jl/  
4/28/08

/Jonathan G. Sterrett/  
Primary Examiner, Art Unit 3623